

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-18 (Cancelled)

Claim 19 (Currently Amended) An acoustic wave device comprising:

a layer of ferroelectric material; and

a substrate,

wherein the layer of ferroelectric material lies between a first electrode deposited on a surface of the substrate or as a constituent part of the substrate and a second electrode, [[and]]

the layer of ~~ferromagnetic~~ ferroelectric material ~~comprises~~ includes a positive first polarization ~~domains~~ domain and a negative second polarization ~~domains~~ domain, and a pitch between the first polarization domain and the second polarization domain is less than 1000 nm.

Claim 20 (Previously Presented) The acoustic wave device as claimed in claim 19, wherein the second electrode is deposited on a surface of the layer of ferroelectric material.

Claim 21 (Previously Presented) The acoustic wave device as claimed in claim 19, further comprising a cover resting on the substrate, said cover having the second electrode, to create a space between said second electrode and the layer of ferroelectric material.

Claim 22 (Previously Presented) The surface wave device as claimed in claim 21, wherein the cover is configured to be removed from the layer of ferroelectric material.

Claim 23 (Currently Amended) The acoustic wave device as claimed in claim 19, wherein the layer of ~~ferromagnetic~~ ferroelectric material ~~comprises~~ includes an unpolarized third ~~domains~~ domain ~~to influence directivity of the acoustic waves.~~

Claim 24 (Currently Amended) The acoustic wave device as claimed in claim 19, wherein the first ~~domains~~ domain and second ~~domains~~ domain are formed as a series of linear domains.

Claim 25 (Previously Presented) The acoustic wave device as claimed in claim 24, wherein the series of linear domains further include unpolarized domains.

Claim 26 (Currently Amended) The acoustic wave device as claimed in claim 19, wherein the first ~~domains~~ domain and the second ~~domains~~ domain are in a matrix arrangement.

Claim 27 (Currently Amended) The acoustic wave device as claimed in claim 26, further including an unpolarized ~~domains~~ domain.

Claim 28 (Previously Presented) The acoustic wave device as claimed in claim 19, wherein the ferroelectric material is lead titanium zirconium oxide.

Claim 29 (Previously Presented) The acoustic wave device as claimed in claim 28, wherein the first electrode is a platinum/titanium alloy.

Claim 30 (Previously Presented) The acoustic wave device as claimed in claim 19, wherein the substrate is made of silicon.

Claim 31 (Previously Presented) The acoustic wave device as claimed in claim 19, wherein the second electrode is made of aluminum.

Claim 32 (Previously Presented) The acoustic wave device as claimed in claim 28, further comprising at least one electrode whose surface is defined by two parameters y and x satisfying an equation of $y = f(x)$, where f is a real function.

Claim 33 (Previously Presented) The acoustic wave device as claimed in claim 28, wherein a spatial polarization distribution in a plane of the layer of ferroelectric material follows a geometrical law so that a resulting polarized surface is defined by two parameters y and x satisfying an equation $y = f(x)$, where f is a real function.

Claims 34-36 (Cancelled)

Claim 37 (New) An acoustic wave device comprising:

a layer including a ferroelectric material; and

a substrate,

wherein the layer lies between a first electrode deposited on a surface of the substrate or as a constituent part of the substrate and a second electrode,

the layer includes a positive first polarization domain and a negative second polarization domain, and a pitch between the first polarization domain and the second polarization domain corresponds to a frequency greater than one gigahertz.

Claim 38 (New) The acoustic wave device of Claim 37, wherein the second electrode is deposited on a surface of the layer.

Claim 39 (New) The acoustic wave device of Claim 37, further comprising a cover resting on the substrate, the cover having the second electrode, to create a space between said second electrode and the layer.

Claim 40 (New) The surface wave device of Claim 39, wherein the cover is configured to be removed from the layer.

Claim 41 (New) The acoustic wave device of Claim 37, wherein the layer includes an unpolarized third domain.

Claim 42 (New) The acoustic wave device of Claim 37, wherein the first domain and second domain are formed as a series of linear domains.

Claim 43 (New) The acoustic wave device of Claim 42, wherein the series of linear domains further include unpolarized domains.

Claim 44 (New) The acoustic wave device of Claim 37, wherein the first domain and the second domain are arranged in a matrix.

Claim 45 (New) The acoustic wave device of Claim 44, further including an unpolarized domain.

Claim 46 (New) The acoustic wave device of Claim 37, wherein the ferroelectric material includes lead titanium zirconium oxide.

Claim 47 (New) The acoustic wave device of Claim 46, wherein the first electrode includes a platinum/titanium alloy.

Claim 48 (New) The acoustic wave device of Claim 37, wherein the substrate includes silicon.

Claim 49 (New) The acoustic wave device of Claim 37, wherein the second electrode includes aluminum.

Claim 50 (New) The acoustic wave device of Claim 46, further comprising at least one electrode, a surface thereof being defined by a first parameter, y , and a second parameter, x , satisfying an equation of $y = f(x)$, where f is a real function.

Claim 51 (New) The acoustic wave device of Claim 46, wherein a spatial polarization distribution in a plane of the layer follows a geometrical law so that a resulting polarized surface is defined by two parameters y and x satisfying an equation $y = f(x)$, where f is a real function.